

## (19) United States

# (12) Patent Application Publication (10) Pub. No.: US 2021/0097729 A1

Palangie et al.

Apr. 1, 2021 (43) **Pub. Date:** 

### (54) METHOD AND DEVICE FOR RESOLVING FOCAL CONFLICT

(71) Applicant: Apple Inc., Cupertino, CA (US)

(72) Inventors: Alexis Henri Palangie, Palo Alto, CA (US); Shih Sang Chiu, San Francisco,

CA (US); Bruno M. Sommer, Sunnyvale, CA (US); Connor Alexander Smith, San Mateo, CA (US); Aaron Mackay Burns,

Sunnyvale, CA (US)

(21) Appl. No.: 16/909,620

(22) Filed: Jun. 23, 2020

#### Related U.S. Application Data

(60) Provisional application No. 62/906,929, filed on Sep. 27, 2019.

#### **Publication Classification**

(51) Int. Cl. G06T 11/00 (2006.01)G06T 5/00 (2006.01)G06T 5/20 (2006.01) (52) U.S. Cl.

CPC ..... G06T 11/00 (2013.01); G06T 5/20 (2013.01); **G06T 5/002** (2013.01)

#### (57)**ABSTRACT**

In one implementation, a method of resolving focal conflict in a computer-generated reality (CGR) environment is performed by a device including a processor, non-transitory memory, an image sensor, and a display. The method includes capturing, using the image sensor, an image of a scene including a real object in a particular direction at a first distance from the device. The method includes displaying, on the display, a CGR environment including a virtual object in the particular direction at a second distance from the device. In accordance with a determination that the second distance is less than the first distance, the CGR environment includes the virtual object overlaid on the scene. In accordance with a determination that the second distance is greater than the first distance, the CGR environment includes the virtual object with an obfuscation area that obfuscates at least a portion of the real object within the obfuscation area.

